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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/501,589	02/10/2000	Osamu Hamamoto	35.C14248	4095

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EXAMINER

MISLEH, JUSTIN P

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 08/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/501,589

Applicant(s)

HAMAMOTO, OSAMU

Examiner

Justin P Misleh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 - 12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 6 – 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 6 recites the limitation "driving the photoelectric conversion area to said semiconductor substrate " in lines 14 and 15. There is insufficient antecedent basis for this limitation in the claim. The limitation will be interpreted as "driving the photoelectric conversion areas."

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claims 1 – 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Murakami.

For the following rejections please refer to figures 1 – 5, 7a, and 8 – 10 and columns 2 (lines 23 – 41 and 54 – 68), 3 (lines 1 – 61), 4 (lines 1 – 4), and 5 (lines 3 – 43).

7. For claim 1, Murakami discloses, an image input apparatus comprising:

a plurality of photoelectric conversion devices (patterned and layered semiconductor layer – 3 – of figure 5d) respectively including photoelectric conversion areas (patterned and divided semiconductor layer – 3 – of figure 5d); and

a light guide member (fiber optic plate – 1 – of figure 3) for guiding light to be incident on the photoelectric conversion area included in each of said photoelectric conversion devices,

wherein said light guide member (1) includes connection means (first and second electrodes – 2 and 4, respectively – of figures 1, 5d, and 7a) for connecting said plurality of photoelectric conversion devices (3) so as to transmit electrical signal between said plurality of photoelectric conversion devices (see column 5, lines 28 – 31).

8. For claim 6, Murakami discloses, an image input apparatus comprising:

a plurality of photoelectric conversion devices (patterned and layered semiconductor layer – 3 – of figure 5d) respectively including photoelectric conversion areas (patterned and divided semiconductor layer – 3 – of figure 5d); and

a light guide member (fiber optic plate – 1 – of figure 3) for guiding light to be incident on the photoelectric conversion area included in each of said photoelectric conversion devices,

wherein said light guide member (1) includes transmission means (first and second electrodes – 2 and 4, respectively – of figures 1, 5d, and 7a) for sending an electrical signal for driving the photoelectric conversion areas (see column 5, lines 28 – 31).

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9. As for claims 2 and 7, Murakami discloses, an apparatus wherein said connection/transmission means includes a terminal and an interconnection first and second electrodes – 2 and 4, respectively – of figures 1, 5d, and 7a).
10. As for claims 3 and 8, Murakami discloses, an apparatus wherein the electrical signal includes a power supply voltage for driving the photoelectric conversion area (see figure 8 and column 5, lines 28 – 31).
11. As for claims 4 and 9, Murakami discloses, an apparatus wherein the electrical signal includes a control signal for driving the photoelectric conversion area (see figure 8 and column 5, lines 28 – 31).
12. As for claims 5 and 10, Murakami discloses, an apparatus wherein said photoelectric conversion device includes driving means for driving the photoelectric conversion area (see column 5, lines 28 – 31).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami.
15. For claim 11, an image input system comprising:
a plurality of photoelectric conversion devices (patterned and layered semiconductor

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layer – 3 – of figure 5d) respectively including photoelectric conversion areas (patterned and divided semiconductor layer – 3 – of figure 5d); and

a light guide member (fiber optic plate – 1 – of figure 3) for guiding light to be incident on the photoelectric conversion area included in each of said photoelectric conversion devices,

wherein said light guide member (1) includes connection means (first and second electrodes – 2 and 4, respectively – of figures 1, 5d, and 7a) for connecting said plurality of photoelectric conversion devices (3) so as to transmit electrical signal between said plurality of photoelectric conversion devices (see column 5, lines 28 – 31).

Murakami do not disclose image processing means for processing an image signal output from said photoelectric conversion device and display means for displaying the signal from said image processing means. Official Notice is taken that both the concepts and advantages of including an image processing means and a display means are well known and expected in the art. It would have been obvious to include an image processing means for noise reduction, image zoom, image focus, image arrangement, etc. and a display means to view the finished image for preview or entertainment.

16. For claim 12, Murakami discloses, an image input apparatus comprising:

a plurality of photoelectric conversion devices (patterned and layered semiconductor layer – 3 – of figure 5d) respectively including photoelectric conversion areas (patterned and divided semiconductor layer – 3 – of figure 5d); and

a light guide member (fiber optic plate – 1 – of figure 3) for guiding light to be incident on the photoelectric conversion area included in each of said photoelectric conversion devices,

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wherein said light guide member (1) includes transmission means (first and second electrodes – 2 and 4, respectively – of figures 1, 5d, and 7a) for sending an electrical signal for driving the photoelectric conversion areas (see column 5, lines 28 – 31).

Murakami do not disclose image processing means for processing an image signal output from said photoelectric conversion device and display means for displaying the signal from said image processing means. Official Notice is taken that both the concepts and advantages of including an image processing means and a display means are well known and expected in the art. It would have been obvious to include an image processing means for noise reduction, image zoom, image focus, image arrangement, etc. and a display means to view the finished image for preview or entertainment.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure for the following reasons: The prior art teaches of the use of fiber optic plates in ether image input devices or image display devices. The fiber optic plates in each invention include connection means and transmission means created using either photoetching or deposition techniques.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin P Misleh whose telephone number is 703.305.8090. The examiner can normally be reached on Monday - Friday, 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on 703.305.4929. The fax phone numbers for the organization where this application or proceeding is assigned are 703.872.9314 for regular communications and 703.872.9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703.306.0377.

JPM

August 7, 2003


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600